


REMARKS

By this Preliminary Amendment minor typographical errors have been corrected in the specification and claims. Specifically, the term "diethylene glycol dimethyl ether" erroneously appears in the application and has been removed by this Preliminary Amendment. Examination on the merits is respectfully requested.

Respectfully submitted,



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IN THE SPECIFICATION:

Please amend the specification as follows:

On Page 4, Second Full Paragraph, continuing through Page 6, First Partial Paragraph

A second method for fabricating an organic thin film according to the present invention comprises the steps of:

forming an undercoating film made of silicon nitride or silicon nitride oxide on a substrate; wet-cleaning the undercoating film using a cleaning liquid; and forming an organic thin film with a thickness of about 100nm or thinner on the undercoating film, of which wet-cleaning has been completed, by turning the substrate and providing a liquid organic material onto the substrate; wherein the organic material contains at least one solvent selected from the group consisting of propylene glycol monomethyl ether acetate, propylene glycol monomethyl ether, ethyl lactate, ethyl methoxy propionate, ethyl ethoxy propionate, 2-heptanone, ethyl pyruvate, diethylene glycol monomethyl ether, methyl cellosolve acetate, propylene glycol monoethyl ether acetate, ethyl methoxy propionate, [methyl lactate, methyl pyruvate and diethylene glycol dimethyl ether] methyl lactate and methyl pyruvate.

According to the second method for fabricating an organic thin film of the present invention, the undercoating film made of silicon nitride or silicon nitride oxide is wet-cleaned and then organic thin film with a thickness of about 100nm or thinner is formed on the undercoating film by the use of an organic material containing at least one solvent selected from the group consisting of propylene glycol monomethyl ether acetate, propylene glycol monomethyl ether, ethyl lactate, methyl methoxy propionate, ethyl ethoxy propionate, 2-heptanone, ethyl pyruvate, diethylene glycol monomethyl ether, methyl cellosolve acetate, propylene glycol monoethyl ether acetate, ethyl methoxy propionate, [methyl lactate, methyl pyruvate and diethylene glycol dimethyl ether] methyl lactate and methyl pyruvate. Then, compared with the conventional organic thin film fabrication method that does not use an organic material containing the above solvent, coating unevenness is unlikely to show up in the resulting organic thin film even when an organic material of low viscosity is employed and therefore the uniformity of the thickness of the organic thin film can be improved. When the

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organic thin film is formed as a resist film or anti-reflection film, it becomes thereby possible to make the resist pattern finer. Then it also becomes possible to provide electronic devices of finer design rules.

On Page 7, Second Full Paragraph, continuing through Page 8, First Partial Paragraph

A third method for fabricating an organic thin film according to the present invention comprises the steps of:
forming an undercoating film made of silicon nitride or silicon nitride oxide on a substrate;
irradiating far ultraviolet ray onto the undercoating film; and forming an organic thin film with a thickness of about 100nm or thinner on the undercoating film onto which far ultraviolet ray has been irradiated by turning the substrate and providing a liquid organic material onto the substrate; wherein the organic material contains at least one solvent selected from the group consisting of propylene glycol monomethyl ether acetate, propylene glycol monomethyl ether, ethyl lactate, methyl methoxy propionate, ethyl ethoxy propionate, 2-heptanone, ethyl pyruvate, diethylene glycol monomethyl ether, methyl cellosolve acetate, propylene glycol monoethyl ether acetate, ethyl methoxy propionate, [methyl lactate, methyl pyruvate and diethylene glycol dimethyl ether] methyl lactate and methyl pyruvate.

According to the third method for fabricating an organic thin film of the present invention, after far ultraviolet ray is irradiated onto the undercoating film made of silicon nitride or silicon nitride oxide formed on the substrate, an organic thin film with a thickness of about 100nm or thinner is formed on the undercoating film by the use of an organic material containing at least one solvent selected from the group consisting of propylene glycol monomethyl ether acetate, propylene glycol monomethyl ether, ethyl lactate, methyl methoxy propionate, ethyl ethoxy propionate, 2-heptanone, ethyl pyruvate, diethylene glycol monomethyl ether, methyl cellosolve acetate, propylene glycol monoethyl ether acetate, ethyl methoxy propionate, [methyl lactate, methyl pyruvate and diethylene glycol dimethyl ether] methyl lactate and methyl pyruvate. Then compared with the conventional organic thin film fabrication method that does not conduct far ultraviolet ray irradiation on the undercoating film or use an organic material

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containing the above solvent, coating unevenness is unlikely to show up in the organic thin film even when an organic material of low viscosity is employed. Therefore, the uniformity of thickness of the organic thin film can be improved. When the organic thin film is formed as a resist film or anti-reflection film, it becomes possible to make fine resist patterns. Then it becomes also possible to provide electronic devices of finer design rules.

On Page 25, Fourth Full Paragraph, continuing on Page 26, First Partial Paragraph

In the second embodiment, propylene glycol monomethyl ether acetate was used as the solvent for the organic material in the fabrication of the organic thin film 19. If the organic material for use in forming the organic thin film 19 contains at least one solvent of propylene glycol monomethyl ether acetate, propylene glycol monomethyl ether, ethyl lactate, methyl methoxy propionate, ethyl ethoxy propionate, 2-heptanone, ethyl pyruvate, diethylene glycol monomethyl ether, methyl cellosolve acetate, propylene glycol monoethyl ether acetate, ethyl methoxy propionate, [methyl lactate, methyl pyruvate and diethylene glycol dimethyl ether] methyl lactate and methyl pyruvate, the same effect as that obtained in this embodiment is provided. On the other hand, if cyclohexanone, diglyme or methyl isobutyl ketone is used as the solvent for the organic material in forming the organic thin film 19, the same effect as that of the present embodiment was not provided and coating unevenness was recognized in the fabricated organic thin film.

On Page 30, Fourth Full Paragraph, continuing on Page 31, First Partial Paragraph

In the third embodiment, propylene glycol monomethyl ether acetate was used as the solvent for the organic material in the fabrication of the organic thin film 20. If the organic material for use in forming the organic thin film 20 contains at least one solvent of propylene glycol monomethyl ether acetate, propylene glycol monomethyl ether, ethyl lactate, methyl methoxy propionate, ethyl ethoxy propionate, 2-heptanone, ethyl. pyruvate, diethylene glycol monomethyl ether, methyl cellosolve acetate, propylene glycol monoethyl ether acetate, ethyl methoxy propionate, [methyl lactate, methyl pyruvate and diethylene glycol dimethyl ether]

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methyl lactate and methyl pyruvate, the same effect as that obtained in this embodiment is provided. On the other hand, if cyclohexanone, diglyzme or methyl isobutyl ketone is used as the solvent for the organic material in forming the organic thin film 20, the same effect as that of the present embodiment was not provided and coating unevenness was recognized in the fabricated organic thin film.

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IN THE CLAIMS:

Please amend claims 6 and 10 as follows:

6. (Amended) A method for fabricating an organic thin film comprising the steps of:
forming an undercoating film made of silicon nitride or silicon nitride oxide on a substrate;
wet-cleaning said undercoating film using a cleaning liquid; and
forming an organic thin film with a thickness of about 100nm or thinner on said undercoating film of which wet-cleaning has been completed by turning said substrate and supplying a liquid organic material onto said substrate;

wherein said organic material contains at least one solvent selected from the group consisting of propylene glycol monomethyl ether acetate, propylene glycol monomethyl ether, ethyl lactate, methyl methoxy propionate, ethyl ethoxy propionate, 2-heptanone, ethyl pyruvate, diethylene glycol monomethyl ether, methyl cellosolve acetate, propylene glycol monoethyl ether acetate, ethyl methoxy propionate, [methyl lactate, methyl pyruvate and diethylene glycol dimethyl ether] methyl lactate and methyl pyruvate.

10. (Amended) A method for fabricating an organic thin film comprising the steps of:
forming an undercoating film made of silicon nitride or silicon nitride oxide on a substrate;
irradiating far ultraviolet ray onto said undercoatilig film; and
forming an organic thin film with a thickness of about 100nm or thinner on said undercoating film onto which far ultraviolet ray has been irradiated, by turning said substrate and supplying a liquid organic material onto said substrate;

wherein said organic material contains at least one solvent selected from the group consisting of propylene glycol monomethyl ether acetate, propylene glycol monomethyl ether, ethyl lactate, methyl methoxy propionate, ethyl ethoxy propionate, 2-heptanone, ethyl pyruvate, diethylene glycol monomethyl ether, methyl cellosolve acetate, propylene glycol monoethyl ether acetate, ethyl methoxy propionate, [methyl lactate, methyl pyruvate and diethylene glycol dimethyl ether] methyl lactate and methyl pyruvate.

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